ELSEVIER

Volume 518 issues 1–2, 2 August 2004

ANALYTICA CHIMICA ACTA

www.elsevier.com/locate/aca

CONTENTS

(Full texts are incorporated in CJELSEVIER, a file in the Chemical Journals Online database available on STN International; Abstracted, indexed in: Aluminium Abstracts; Anal. Abstr.; Biol. Abstr.; BIOSIS; Chem. Abstr.; Curr. Contents Phys. Chem. Earth Sci.; Engineered Materials Abstracts; Excerpta Medica; Index Med.; Life Sci.; Mass Spectrum. Bull.; Material Business Alerts; Metals Abstracts; Sci. Citation Index)

UV-visible absorption spectrophotometry

Review—Recent developments in derivative ultraviolet/visible absorption spectrophotometry
C. Bosch Ojeda and F. Sanchez Rojas (Málaga, Spain) 1

Hardness screening of water using a flow-batch photometric system
R.A.C. Lima (Recife, Brazil), S.R.B. Santos, R.S. Costa, G.P.S. Marcone (Joao Pessoa, Brazil), R.S. Honorato, V.B. Nascimento (Recife, Brazil) and M.C.U. Araujo (Joao Pessoa, Brazil) 25

Chemiluminescence and fluorescence

Multicommutated flow system for the chemiluminometric determination of clomipramine in pharmaceutical preparations
K.L. Marques, J.L.M. Santos and J.L.F.C. Lima (Porto, Portugal) 31

Determination of hydrochlorothiazide in pharmaceutical preparations by time resolved chemiluminescence
J.A. Murillo Pulgarín, A. Alañón Molina and G. Pérez-Olivares Nieto (Ciudad Real, Spain) 37

Development of an enzymatic flow-injection chemiluminescence system for determining inorganic pyrophosphate ion
H. Nakamura, R. Yamazaki (Tokyo, Japan), T. Shirai (Saitama, Japan), H. Sano, Y. Nakami, K. Ikebukuro, K. Yano, Y. Nomura, Y. Arikawa (Tokyo, Japan), Y. Hasebe (Saitama, Japan), Y. Masuda and I. Karube (Tokyo, Japan) 45

Continuous fluorescence determination of formaldehyde in air
K. Motyka and P. Mikuška (Brno, Czech Republic) 51

Chip-based sample injection

Effects of spatial gradients of electrical conductivity on chip-based sample injection processes
C.L. Ren and D. Li (Toronto, Canada) 59

Sensors and electroanalytical chemistry

Electrochemical DNA biosensor for the detection and discrimination of herpes simplex Type I and Type II viruses from PCR amplified real samples
P. Kara, B. Meric, A. Zeytinoglu and M. Ozsoz (Bornova Izmir, Turkey) 69

Investigation of microfabrication of biological sample arrays using piezoelectric and bubble-jet printing technologies
L.R. Allain (West Point, PA, USA), D.N. Stratis-Cullum (Adelphi, MD, USA) and T. Vo-Dinh (Oak Ridge, TN, USA) 77

Membrane electrode sensitive to a cationic surfactant in aquo-organic media
S.R. Patil and A.K. Rakshit (Vadodara, India) 87

The dynamic response of optical oxygen sensors and voltammetric electrodes to temporal changes in dissolved oxygen concentrations
B.T. Glazer, A.G. Marsh, K. Stierhoff and G.W. Luther III (Lewes, DE, USA) 93

Metalophthalocyanine complexes as ion-carriers in membrane-selective electrodes for detection of thiosalicyiic acid
S. Shahrokhian and A. Souri (Tehran, Iran) 101

Catechin electrochemical oxidation mechanisms
P. Janeiro and A.M. Oliveira Brett (Coimbra, Portugal) 109

Challenges in modelling and optimisation of stability constants in the study of metal complexes with monoprotonated ligands
Part III. A glass electrode potentiometric and polarographic study of Cu-DIPSO-OH system
C.M.M. Machado (Porto, Portugal), S. Scheerlinck (Porto, Portugal and Gent, Belgium), I. Cukrowski (Johannesburg, South Africa) and H.M.V.M. Soares (Porto, Portugal) 117

Enzyme-based analysis

Specific detection of L-glutamate in food using flow-injection analysis and enzymatic recycling of substrate
W. Khampha (Bangkok, Thailand and Lund, Sweden), J. Yakovleva (Lund, Sweden), D. Isarangkul (Nakorn Pathom, Thailand), S. Wiyakrutta, V. Meevootisom (Bangkok, Thailand) and J. Emnéus (Lund, Sweden) 127

Single particle inductively coupled plasma–mass spectrometry

Zirconia colloid analysis by single particle inductively coupled plasma–mass spectrometry
C. Degueldre (Villigen, Switzerland), P.-Y. Favarger (Versoix, Switzerland) and C. Bitea (Karlsruhe, Germany) 137

Separation and preconcentration

Preconcentrative separation of erbium from Y, Dy, Ho, Tb and Tm by using ion imprinted polymer particles via solid phase extraction
R. Kala, J. Mary Gladis and T. Prasada Rao (Trivandrum, India) 143

Supercritical fluid immunoextraction: a new approach for immunoassay automation
R. Bauza, A. Ríos, A. Gómez-Hens and M. Valcárcel (Córdoba, Spain) 151

Ultrasound assisted mercury extraction from soil and sediment
A. Collasiol, D. Pozebon and S.M. Maia (Porto Alegre, Brazil) 157

Nonionic surfactant mixtures: a new cloud-point extraction approach for the determination of PAHs in seawater using HPLC with fluorimetric detection
B. Delgado, V. Pino, J.H. Ayala, V. González and A.M. Afonso (La Laguna, Spain) 165

Simultaneous preconcentration of vanadium(V/IV) species with palmitoyl quinolin-8-ol bonded to amberlite XAD 2 and their separate spectrophotometric determination with 4-(2-pyridylazo)-resorcinol using CDTA as masking agent
H. Filik, K.I. Berker, N. Balkis and R. Apak (Istanbul, Turkey) 173

Liquid and gas chromatography

Influence of spacers and organic modifiers on chromatographic behaviors on chiral diamide stationary phase with *N*-(3,5-dimethylbenzoyl)-D-phenylglycine
Z. Chen, T. Fuyumuro, K. Watabe and T. Hobo (Tokyo, Japan) 181

Enhancement of retention predictions in reversed-phase liquid chromatography using reference compounds
V. Concha-Herrera, G. Vivó-Truyols, J.R. Torres-Lapasió and M.C. García-Alvarez-Coque (Burjassot, Spain) 191

Instructions to Authors 199

Authors Index 201

Calendar of forthcoming meetings N1

CONTENTS Direct

This journal is part of **ContentsDirect**, the *free* alerting service which sends tables of contents by e-mail for Elsevier books and journals. You can register for **ContentsDirect** online at: **http://contentsdirect.elsevier.com**

SCIENCE DIRECT®

Full text of this journal is available, on-line from **ScienceDirect**. Visit **www.sciencedirect.com** for more information.